

Six new species of Membracidae (Hemiptera: Homoptera)
from South Africa

by

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OXYRHACHINAE

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***Oxyrhachis hoffmanni* spec. nov.**

Very close to *O. contigua* Capener but differing in the more upright supra-humeral horns which have broader tips, in the less obumbrant frontal margin of the pronotum, and the rather dense pilosity which gives the insect a more greyish appearance.

MALE: *Head* vertical; vertex a little wider than long, subplanate and very weakly moulded, dark blackish-brown, rather densely pilose with short thick adpressed whitish hairs (not micro-hairs as in *contigua*); upper margin shallowly arcuate and weakly sinuate; lower margins oxyrhachine with blunt slightly backwardly turned lateral teeth and lower margins of foliate lobes a little upturned and inwardly curved to frontoclypeus; eyes a little obliquely subglobose, dull brownish; ocelli dark succineous, about equidistant from each other and from eyes and set a little above the centro-ocular line; frontoclypeus about as wide as long, slightly declivous, not extending below lower margins of foliate lobes, tip truncate, slightly concave, marginate with rather long pilosity.

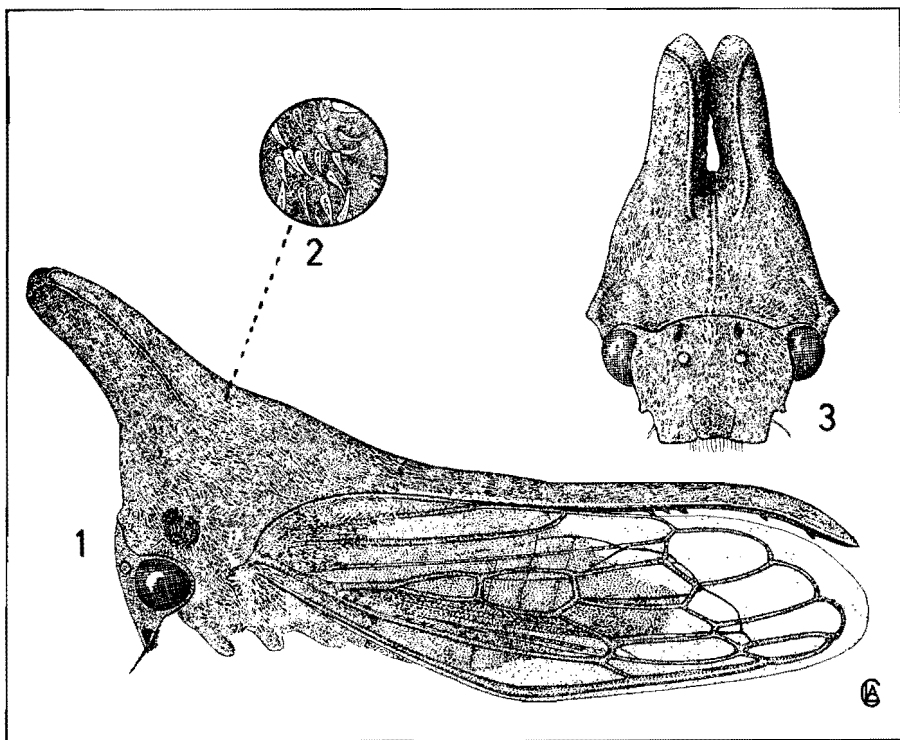
Thorax: Pronotum dark brown, punctate, with short thick adpressed whitish hairs, median carina percurrent, metopidium vertical about twice as wide as high, frontal margin scarcely obumbrant, supra-ocular callosities large, impunctate and somewhat obscure. Suprahumeral horns slightly longer than posterior tibiae, much more upright than in *contigua*, forming an angle of about 160° with posterior process, parallel and contiguous pre-apically on their inner surfaces, strongly tricarinate with apices bluntly rounded, lateral surfaces very weakly convex, posterior surfaces planate, inner (true dorsal) surfaces strongly convex. Posterior process very broad at base and shallowly tectiform, strongly tricarinate with a strong ventral keel armed with four or five backwardly directed thorn-like teeth, apically decurved following curve of tegmina, extreme tip sharp and extending well beyond tip of abdomen and sometimes beyond tips of tegmina. Humeral angles prominent and blunt, lower pronotal and mesonotal processes well developed; legs castaneous, tibiae externally with broad adpressed whitish hairs. Abdomen dark brown with posterior margins of tergites paler.

FEMALE: Similar to male. In one specimen the suprahumeral horns do not quite touch each other.

*Measurements**: Length ♂ 6.8-7.0, ♀ 6.86; to tip of posterior process ♂ 6.48-6.86, ♀ 6.48-7.46; width at tips of horns ♂ .66-.79, ♀ .66-.92; at humeral angles ♂ 2.10-2.31, ♀ 2.31-2.44; at eyes ♂ 2.05-2.08, ♀ 2.10; distance from humeral angles to tips of horns ♂ 3.04-3.24, ♀ 3.50.

Hostplant: *Heteropyxis natalensis* Sond. This has hitherto not been recorded as a hostplant of Membracidae, and is of special interest in that the genus appears to have no close relatives.

MATERIAL EXAMINED: ♂-holotype, 2♂- and 2♀-paratypes from Kaapmuiden, E. Tvl., 27 May 1965, collected by M. Hoffmann, for whom I have pleasure in naming the species. Holotype and paratypes in National Collection of Insects, Pretoria.



Figs. 1-3. *Oxyrhachis hoffmanni* spec. nov. 1. Lateral aspect ♂. 2. Enlarged detail of hairs. 3. Frontal aspect ♂

*All measurements in millimetres.

CENTROTINAE

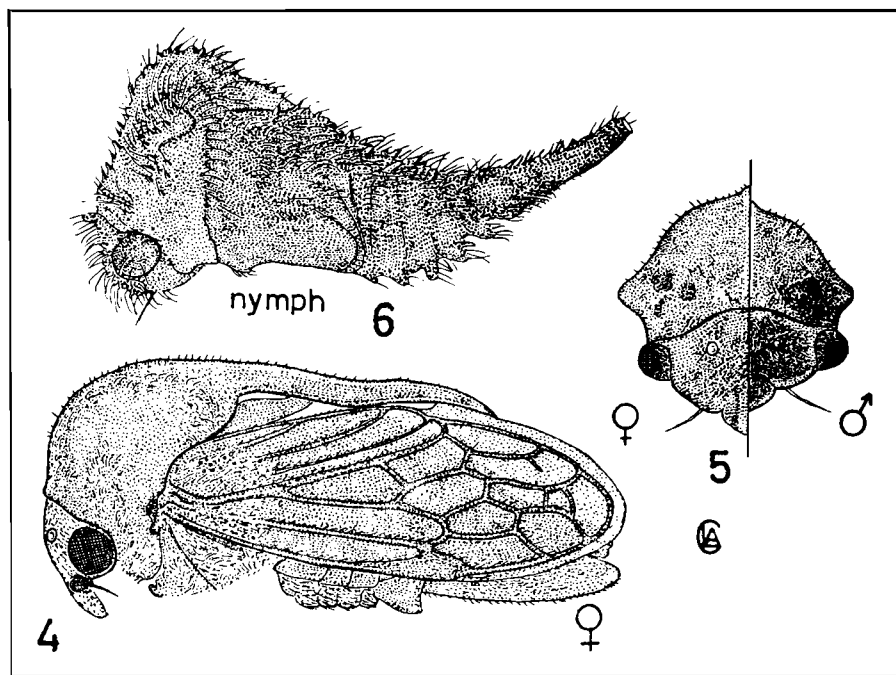
CENTROTINI

***Tiberianus platoni* spec. nov.**

Differing from *T. typicus* Distant in the absence of suprahumeral carinae. General colour yellowish brown.

FEMALE: Head vertical, vertex about 1.67 times wider than long, weakly convex, very finely punctate with very short adpressed pale hairs, upper margin arcuate and sinuate, lower margins sloping to frontoclypeus, eyes reddish, ocelli pale succineous, a little closer to eyes than to each other and situated about on centro-ocular line, frontoclypeus somewhat declivous, extending about half its length below lower margins of vertex, rounded.

Thorax: Pronotum very finely punctate with very short adpressed hairs, convex, metopidium vertical, supra-ocular callosities obscure, humeral angles prominent and blunt, posterior angles rounded, posterior margin arcuate over base of scutellum, median carina strongly percurrent, devoid of suprahumeral horns or carina. Posterior process emerging horizontally from disc and ventrally from posterior margin, just clear of scutellum and usually impinging on its tip and margins of tegmina, tectiform with



Figs. 4-6. *Tiberianus platoni* spec. nov. 4. Lateral aspect ♀. 5. Frontal aspect ♂ and ♀. 6. Nymph, lateral aspect.

median carina strong, lateral carinae indistinct, very weakly undulate, apical fourth acuminate and very slightly decurved, extending about halfway along margin of 5th apical cell. Scutellum wider than long, triangular and somewhat saddle-shaped, not basally swollen, apically roundly emarginate, apices acute. Tegmina about 2.5 times longer than wide extending as far as tip of abdomen, translucent, basal fifth coriaceous and punctate with short hairs, veins and pterostigma pale yellowish brown, apical limbus rather narrow, tip rounded. There is a tendency to the formation of spurious cross-veins in the apical region. Sides of thorax, legs and abdomen yellowish brown.

MALE: The only specimen available is similar to the female except that the vertex and frontoclypeus is almost entirely black as is the supra-ocular area. A tendency to black pigmentation is noticeable on the sides of the thorax and coxae.

NYMPH (final instar): Pale yellowish brown marked with dark brown on bases of wing pads and more or less densely covered with small whitish tubercles terminating in a hair. The lateral abdominal lamellae are well developed and tuberculate. The anal tube is about as long as the posterior tibiae.

Measurements: Length to tips of tegmina ♂ 3.47, ♀ 4.22-4.55. Length to tip of posterior process ♂ 2.54, ♀ 3.43-3.56. Width at humeral angles ♂ 1.51, ♀ 1.78-1.98. Width at eyes ♂ 1.36, ♀ 1.56-1.68.

Hostplant: *Cassia petersiana* Bolle. The type-series was collected by my late colleague Dr Platon Paliatseas and I have pleasure in giving the species his name.

MATERIAL EXAMINED: ♀-holotype, 1 ♂, 9 ♀-paratypes and 2 nymphs from Mooketsi, N. Tvl., 26 XII 1965, coll. P. Paliatseas; also 2 ♀♀, Nr. Glendale, Rhodesia, 26.XII.56, coll. C. N. Smithers.

***Distantobelus hibernus* spec. nov.**

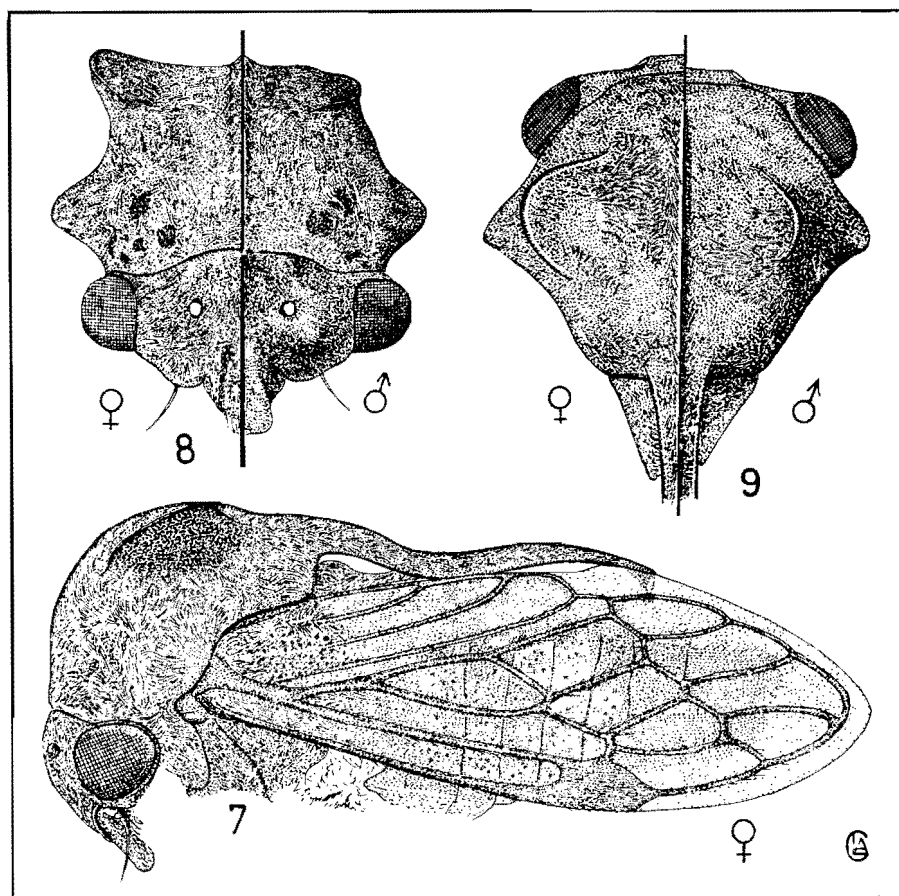
Differing from *D. sericeus* (Capener) and *D. brunneus* (Funkhouser) in the shorter suprahumeral horns of the female and in the shallower, less undulate posterior process.

General colour castaneous.

FEMALE: *Head* vertical, vertex about 1.67 times wider than long, a little convex and moulded, castaneous, finely punctate, somewhat densely pilose with adpressed pale golden hairs, upper margin arcuate and a little sinuate, lower margins obliquely sloping and curved to frontoclypeus; eyes dull ochraceous, ocelli succineous, slightly closer to eyes than to each other and situated above the centro-ocular line; frontoclypeus a little declivous, about as wide across lobes as long, extending about half its length below lower margins of vertex, lateral margins of lobes oblique almost to broadly rounded tip.

Thorax: Pronotum castaneous, finely punctate, somewhat densely pubescent with adpressed pale golden hairs, median carina strongly percurrent, blackish on metopidium and disc, metopidium vertical, about twice as wide as high, supra-ocular callosities partly obscured by hairs, frontal margin a little obumbrant, humeral angles prominent and blunt, posterior angles rounded, posterior margin transverse and arcuate over base of scutellum. Suprahumeral horns short, somewhat compressed,

semicircular, extending outwards but not beyond extremities of eyes and slightly upwards, with a single curved carina, lateral carinae obsolete, dorsal surface planate. Posterior process emerging behind disc and from posterior margin, not elevated and weakly undulate, basally just clear of scutellum and impinging on its tip, contiguous with anal margins of tegmina and weakly decurved at anal angle, tricarinate, tectiform and gradually acuminate, tip sharp and extending about as far as extremity of pterostigma. Scutellum wider than long, basally a little swollen, finely punctate with adpressed hairs, tip shallowly emarginate, apices rather blunt. Tegmina a little more than 2.5 times longer than wide, hyaline, basal fifth coriaceous, punctate and a little darker nearer subcostal margin, veins pale brown, pterostigma moderately large, a brownish fascia from anal margin to pterostigma and a small brownish macula on limbus at anal angles, apical limbus narrow, tip somewhat acutely rounded. Sides of thorax darkish



Figs. 7-9. *Distantobelus hibernus* spec. nov. 7. Lateral aspect ♀. 8. Frontal aspect ♂ and ♀. 9. Dorsal aspect ♂ and ♀.

brown, somewhat tomentose on metathorax. Legs castaneous, darker on basal joints. Abdomen greyish and punctate.

MALE: Somewhat darker than female. Vertex medially and marginally blackish, disc planate, frontoclypeal lobes very short and oblique, tip of frontoclypeus truncate. Without suprahumeral horns and in their place a strong almost semicircular carina. In other respects similar to female.

Hostplants: *Millettia grandis* (E. Mey.) Skeels and *Scutia myrtina* (Burm. s.) Kurz, the former being the most usual.

Measurements: length to tips of tegmina ♂ 4.03-4.36, ♀ 4.88-5.02, to tip of posterior process ♂ 3.24-3.37 ♀ 3.70-3.96; width across tips of horns ♀ 1.72-2.05, at humeral angles ♂ 1.85-1.98, ♀ 2.24-2.31, at eyes ♂ 1.65-1.72, ♀ 1.92-1.98.

MATERIAL EXAMINED: ♀-Holotype, 74 ♀-, 37 ♂-paratypes from Umtentweni, Natal, July 1951-1956, A. L. Capener. The specific name was chosen because all the specimens were taken during the winter. Holotype and paratypes in Capener collection. Paratypes will be placed in the National Collection of Insects, Pretoria; British Museum (Nat. Hist.), London; and United States National Museum, Washington.

***Distantobelus natalensis* spec. nov.**

Differing from *D. brunneus* (Funkhouser) and *D. sericeus* (Capener) in the horizontal horns, which are also present but reduced in the male.

FEMALE: *Head* vertical; vertex nearly twice as wide as long, weakly moulded, finely punctate with thickish adpressed golden hairs, upper margin arcuate and sinuate, lower margins carinate slightly sloping to frontoclypeus and very slightly upturned; eyes opaque, brownish and somewhat mottled, slightly ovate, ocelli succineous, slightly closer to eyes than to each other and situated above centro-ocular line; frontoclypeus a little declivous, about as wide across lobes as long, lobal sutures impunctate and bare, lateral lobes sloping, tip rounded and a little upturned.

Thorax: Pronotum finely punctate with rather dense adpressed pale golden hairs, frontal margin weakly obumbrant, humeral angles prominent and blunt, posterior angles rather obtusely rounded, posterior margin about at right angles to median line and arcuate over base of scutellum, median carina strongly percurrent, metopidium wider than high, vertical, disc weakly convex. Suprahumeral horns short, horizontal, extending outwards only very slightly beyond humeral angles, apices sharp, anterior carinae strong, curving backwards and outwards, lateral carina short, posterior carina almost obsolete except at extreme tip, dorsal surface planate and a little frontally oblique. Posterior process emerging horizontally from disc and ventrally from posterior margin, undulate, just clear of scutellum at base and impinging on its tip and margins of tegmina and following curve at their anal angles, tectiform and gradually acuminate to sharp tip which extends about as far as extremity of 5th apical cell, tricarinate with median carina strong and lateral carinae somewhat obscure, ventral surface planate. Scutellum a little longer than wide, triangular, base a little convex, rather densely covered with matted

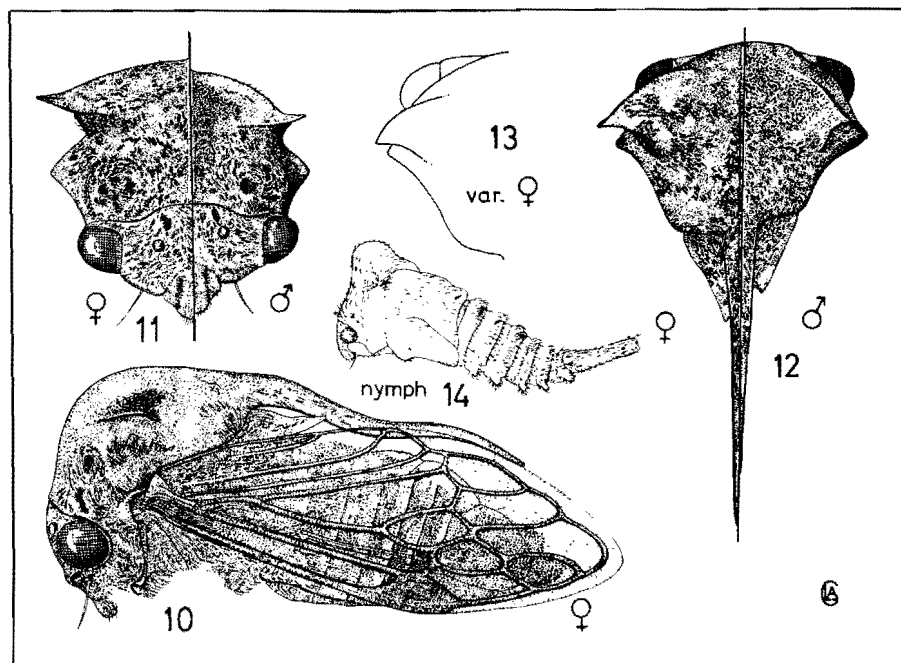
hairs, apex roundly emarginate with apices acute and paler than base. Tegmina about 2.5 times wider than long, clear hyaline, basal fifth coriaceous and punctate with adpressed hairs, pterostigma rather large, somewhat oval with scattered hairs, veins reddish brown margined with short hairs, apical limbus rather narrow, tip somewhat pointed. Legs castaneous becoming paler towards tarsi.

MALE: Similar to female but with suprahumeral horns distinctly shorter, often with a blackish suffusion on metopidium and disc and these areas rather more strongly punctate.

Nymph of typical platybeline form, with fine tuberculate hairs, anal tube a little longer than hind tibiae, but without special distinguishing features.

Hostplants. The favoured hostplant appears to be *Millettia grandis* (E. Mey.) Skeels on which all but two specimens were found, the two exceptions being taken on *Scutia myrtina* (Burm. s.) Kurz.

Measurements: Length frontal margin to tips of wings ♂ 4.88-5.41, ♀ 5.48-5.54, to tip of posterior process ♂ 3.96-4.49, ♀ 4.29-4.95; width across tips of horns ♂ 2.05-2.44, ♀ 2.36-3.17; width at humeral angles ♂ 2.11-2.44; ♀ 2.30-2.77; width at eyes ♂ 2.05-2.10, ♀ 2.05-2.31.



Figs. 10-14. *Distantobelus natalensis* spec. nov. 10. Lateral aspect ♀. 11. Frontal aspect ♂ and ♀. 12. Dorsal aspect ♂ and ♀. 13. Variation of horn in ♀. 14. Nymph, lateral aspect.

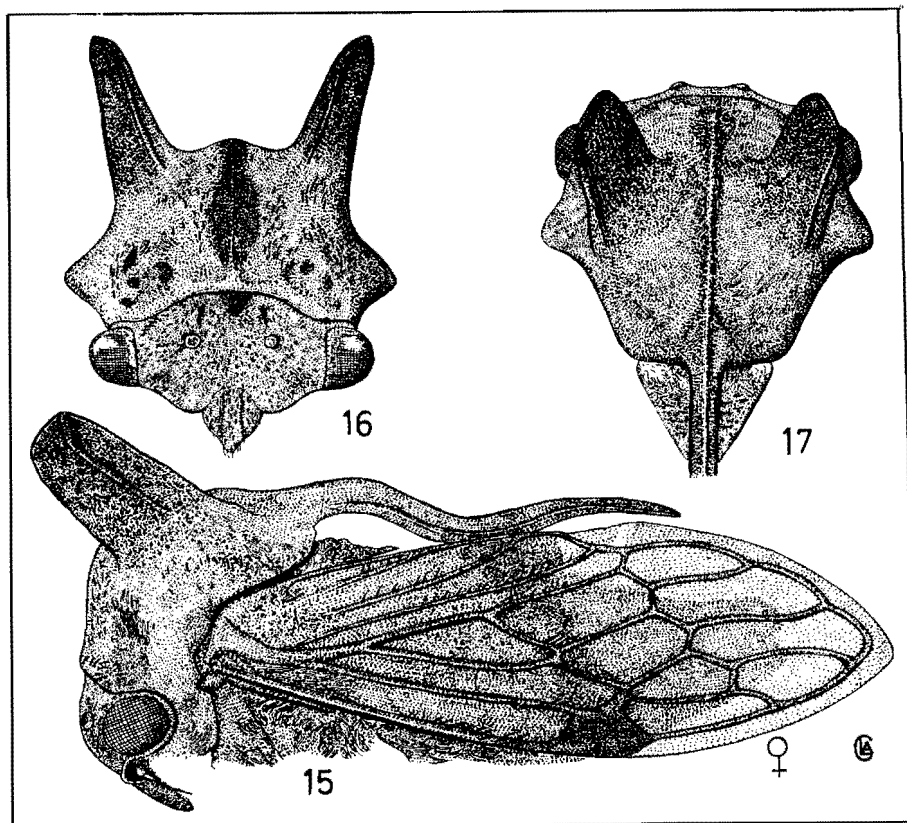
MATERIAL EXAMINED: ♀-holotype, 32 ♂, 58 ♀-paratypes all from Umtentweni district (Umtentweni-Sea Park) in July 1950-1955, A. L. Capener. Holotype and paratypes in Capener collection, paratypes in National Collection of Insects, Pretoria; British Museum (Nat. Hist.), London; and United States National Museum, Washington.

***Distantobelus electus* spec. nov.**

Near *D. brunneus* (Funkhouser) but female with broader, more upright supra-humeral horns and tips of tegmina more pointed, horns longer than those of all other known species.

FEMALE: General colour dull castaneous.

Head vertical; vertex about 1.5 times wider than long, convex, very finely punctate with very short adpressed golden hairs, upper margin arcuate and sinuate,



Figs. 15-17. *Distantobelus electus* spec. nov., ♀. 15. Lateral aspect. 16. Frontal aspect. 17. Dorsal aspect.

lower margins oblique, weakly undulate and rounded to frontoclypeus; eyes castaneous, ocelli succineous, a little closer to eyes than to each other and situated a little above the centro-ocular line; frontoclypeus declivous, about as long as wide across lobes, somewhat diamond-shaped with tip rounded, lobes laterally oblique and weakly curved.

Thorax: Pronotum finely punctate with short adpressed golden hairs, castaneous, median carina percurrent and blackish, humeral angles prominent and blunt, posterior angles obtusely rounded, posterior margin at right angles to median line and arcuate over base of scutellum; metopidium vertical, about twice as wide as high, a little depressed laterally of median carina to supra-ocular callosities, blackish medially. Suprahumeral horns about as long as height of metopidium, laterally compressed, narrowly triangular in section, the apex at frontal margin, directed forwards and upwards, extending laterally about as far as width of eyes, anterior and posterior carinae strong, lateral carina obscure, tips somewhat truncate. Posterior process slender and sinuate emerging behind disc and from posterior margin, arcuate over scutellum and impinging on anal margins of tegmina and continuing acuminate and sinuately to sharp tip which about reaches middle of margin of 5th apical cell, tricarinate with lateral carina somewhat obscure, triangular in section with ventral surface planate. Scutellum triangular, wider than long, rather strongly punctate with transverse golden hairs, base a little swollen in middle, a small tuft of white tomentose hairs at basal angles, tip weakly concavely emarginate, apices blunt and not elevated. Tegmina hyaline, about three times as long as wide, basal sixth coriaceous and punctate, pterostigma castaneous rather large about 1.5 times longer than wide, veins castaneous margined with golden hairs, a brownish fascia from anal angle to pterostigma, apical limbus narrow, tip somewhat pointed. Sides of thorax dark castaneous, legs basally blackish, tibiae and tarsi castaneous.

Measurements: Length frontal margin to tips tegmina 4.81-5.48, to tip posterior process 3.96-4.16; width across tips of horns 1.98, at humeral angles 2.24-2.31, at eyes 1.92-1.98.

Hostplant unknown. The holotype was taken by beating mixed foliage.

MATERIAL EXAMINED: ♀-Holotype, Qudeni Forest, Zululand, 3 XI 1949 coll. A. L. Capener; in Capener collection. ♀-Paratype, Umhlanga, Natal, 20 VIII 1944, coll. W. H. Bell-Marley; in South African Museum, Cape Town.

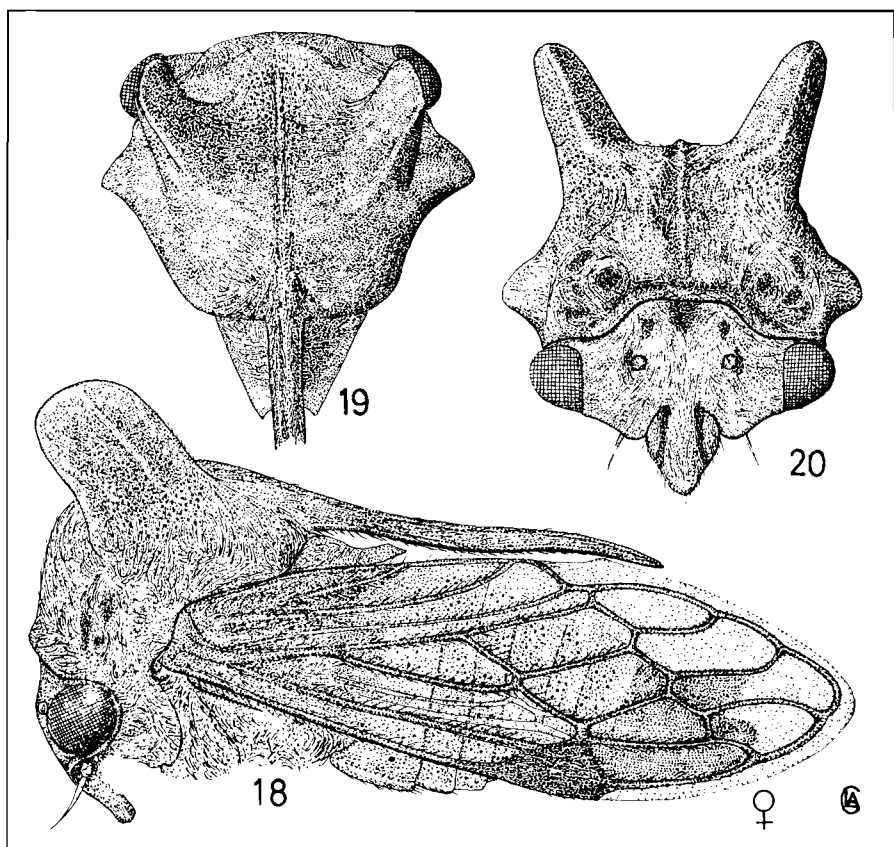
***Distantobelus comatus* spec. nov.**

Very close to *D. electus* but differing in the almost straight posterior process and the somewhat shorter suprahumeral horns which are broader from lateral aspect.

FEMALE: General colour pale castaneous.

Head vertical, vertex about 1.5 times wider than long, weakly moulded, very finely punctate with strong adpressed golden hairs, a black median macula between and above ocelli, upper margin strongly arcuate and sinuate, lower margins oblique and curved to frontoclypeus; eyes somewhat vitreously leaden-coloured, ocelli pale succineous; closer to eyes than to each other and situated a little above centro-ocular line, frontoclypeus bluntly diamond-shaped with lobal sutures darkly impunctate, antennae ochraceous.

Thorax: Pronotum pale castaneous with fine black puncturation rather densely covered with moderately long recumbent golden hairs, median carina strongly percurrent, metopidium vertical, about twice as wide as high, frontal margin obumbrant, humeral angles prominent and blunt, posterior angles rounded, posterior margin transverse and arcuate over base of scutellum. Suprahumeral horns somewhat laterally compressed, extending upwards, a little forwards but not beyond frontal margin and a little divaricate, tips broadly rounded with anterior and posterior carinae uniting in curve, lateral carina somewhat obscure, all surfaces weakly convex. Posterior process emerging behind disc and from posterior margin, slightly above scutellum, about impinging on margins of tegmina, apical fourth acuminate and a little decurved, tip sharp and extending about halfway along margin of 5th apical cell, triangular in section, ventral surface planate, lateral carina somewhat obscure. Scutellum triangular, wider than long, basally weakly swollen in middle, tip a little upturned and weakly concavely emarginate with apices acute. Tegmina about three times as long as wide, clear hyaline with a brownish fascia



Figs. 18-20. *Distantobelus comatus* spec. nov., ♀. 18. Lateral aspect. 19. Dorsal aspect. 20. Frontal aspect.

from just before anal margin to pterostigma, basal sixth coriaceous and punctate, veins pale, fringed with rather long golden hairs, pterostigma rather densely covered with similar hairs, apical limbus rather narrow, apex somewhat pointed. Legs basally blackish with apex of femora, tibiae and tarsi pale ochraceous brown and claws dark brown to black. Abdomen creamy with dark puncturation above, sternites greyish with black puncturation and posterior margins cream, terminalia castaneous.

Measurements: Length frontal margin to tips tegmina 5.28, to tip posterior process 4.03; width across tips of horns 1.71-1.98, at humeral angles 2.24-2.38, at eyes 1.98. Nymph. Similar to that of *sericeus* and densely pubescent but with more prominent suprahumeral buds.

Hostplant. *Chrysanthemoides monilifera* (L.) Norl.

MATERIAL EXAMINED: ♀-Holotype, ♀-paratype and two nymphs from Nahoun Mouth, East London, C.P., 28 III 1965, A. L. Capener; in National Collection of Insects, Pretoria.

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